

Questions can be sent to ARPA-E-CO@hq.doe.gov

CONCEPT PAPER PHASE - LAST DAY TO SUBMIT QUESTIONS: 11/24/2014

SECOND DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV: 5 PM ET, MARCH 16, 2015

QUESTIONS AND ANSWERS

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-	Q10. We are currently developing a ****. I am wondering on whether you would accept propose FOA-0001198 on the development of ****. Once we have developed the technology further, we partner with ****. Q11.A. Does the proposal need to have both a prime mover and an electric generator or an indesign of the electric generator will be sufficient? Q11.B. Is fault tolerance an important objective in the criteria as well? Q12.A. I just received the announcement of this FOA for 1KW Genset innovation. Has concept deadline has passed and can I still submit a Concept Paper? Q12.B May I present a concept for a GENSET that ****? Q12.C May I discuss anything with the FOA examiner or point person? Questions for week ending: November 7, 2014 Q13. What are the restrictions on the Principal Investigator? Can there be more than 1? Q14. Regarding the opportunity for a device to provide both heating and cooling, in addition to out, how should that cooling option be address in a concept paper response? In our opinion a capability would broaden the market appeal due to the large number of homes that are currently conditioned. Assuming the device provides 1kW of electricty: Should the response just focus on heating only? Is a response stronger with an added cooling capability? Would cooling capability be viewed negatively?



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	reduction must continue to meet the statutory minimum cost share requirement (20%) for its portion of the Total Project Cost."
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	Q19. We were encouraged to write a full proposal on Feb 9 but there are no instructions on the content of the full application or the review criteria for the full proposal in the current FOA document. In the FOA, it states these sections will be updated in February. When should we receive instructions on the content of the full application and will we be granted a submission extension since we have 28 days left until the deadline?
	Q20. Section 2.3 of the technical volume template contains the following bullet point: "The schedule should include a milestone for the delivery of a 1-kW _e prototype at the end of the second project year which will be subjected to independent testing. This prototype need not meet the final deliverable milestones for the project." Since this statement was not included in the FOA and only in the template, it is unclear to me if all projects are bound to this milestone. Please clarify if this is a requirement or not
	Q21. ***** [Name of Entity] received a notification to Encourage Submission of Full Application for the subject opportunity. ***** [Name of Entity] is a large business. Our potential partners consist of 1 Large Business and 1 Small Business. Our large business partner, as well as ****** [Name of Entity], desire to retain ownership of any inventions conceived during performance of the contract. Can an advanced waiver be issued (allowing ****** [Name of Entity] and our large business partner to retain ownership of our respective inventions, if any), prior to submittal of our full application?
	Q22. Our ***** [description of technology] will produce DC electricity and will not require an alternator, but will require an inverter. For the cost and efficiency of the inverter, should we use10
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Q26. The ARPA-E Model Sub-award identifies attachments 1, 2, 3, 4 and 6. Are attachments 3, 4 & 6 of the

Model Sub-award the same attachments that are submitted in the Prime Recipient Award (with the Sub-recipient work indicated), or are these attachments modified to include only the Sub-recipient work?11
Q27. My company will be the Prime Recipient of the project. However, we will be working with **** (a university) and its engineers and staff on many of the technical issues. Our company will share the PI responsibility with a professor at the University. The Business Assurance
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Q31. Can a smaller effort working on a key technological innovation demonstration that can be coupled with other projected efficiency gains be considered for funding at a lower-level without having to do a full demonstration, or meet all of the FOA metrics?
Q32. Attachment 2 of the Model Subaward Agreement identifies web addresses for IP provisions. However, the web addresses do not work. Please provide a working link to each of the three IP provisions identified in Attachment 2
Q33. We were encouraged to submit a full proposal for the DE-FOA-0001198 – GENSETS FOA. Upon brainstorming, we are finding a new ways to improve the Fuel-electricity efficiency. Are we allowed to change the hardware and strategies discussed in our concept paper or do we have to stick to what was initially proposed?
Q34. Clause 23 b. "Pre Award Costs" of Attachment 1 of the Prime Recipient Model award allows for the recovery of allowable costs (\$20K or less) incurred up to 90 days before the effective date of the award. The model Subaward does not contain this provision. Are sub-recipients allowed to recover allowable costs (\$20K or less) incurred up to 90 days before the effective date of the award, or, does the \$20K limit provision in the Prime Recipient Model Award apply to the total of both the Prime's pre-awards costs and potential pre-award costs of all sub-recipients?
Q35. Please clarify the amount that ARPA-E will pay the Prime Recipient and the Sub-recipients for patent costs – does the \$30,000 threshold on patent expenditures apply to both or are these separate amounts which total to \$60,000.
Q36. In the Technical Volume Template, it mentions that the Executive Summary shall not exceed 1 page in length and should be on a page separate from the Summary for Public Release. What is the Summary for



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	Q40. I'm working with a team at **** (name of university) preparing a proposal to GENSETS (DE-FOA-0001198). One of their partners is an FFRDC – we have already sent them the business assurances form to complete their sections in that document, so our question is do they complete the budget justification spreadsheet as well or is there another budget form that they are required to complete?
	Q41. I am working on a Field Work Proposal that is needed for a submission to an FOA, DE-FOA-0001198, and need to include the contact information for the Program Area Director. Could you please provide that information to me?
	Q42. Based on the "suggested" page length instructions in the Technical Volume template we intended to use 14-15 pages for the Proposed Work Section, while meeting the overall maximum 30 page requirement. Please confirm that this is acceptable
	Q43. Per Section 2.3 (Schedule) of the GENSETS Technical Volume Template, the schedule should include a milestone for the delivery of a 1-kWe prototype at the end of the second project year which will be subjected to independent testing. Will ARPA-E permanently keep the Year-2 prototype? If ARPA-E returns the Year-2 prototype, how long does ARPA-E plan to keep it for independent testing?
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	Q46. The GENSETS are to be located in residences. Can water from the residence be used?16



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I. FREQUENTLY ASKED QUESTIONS:

A. If I have questions about this funding announcement, who do I contact?

ANSWER: Please see the FOA guidance on submitting FOA content questions and response publication. Applicants may submit questions regarding this ARPA-E's Funding Opportunity Announcement (FOA) to ARPA-E-CO@hq.doe.gov. All emails must include the FOA name and number in the subject line. The cover page and Executive Summary of the Funding Opportunity Announcement state the deadlines for submitting questions to ARPA-E-CO@hq.doe.gov.

B. How will I receive a response to questions submitted to arpa-e-co@hq.doe.gov about this FOA?

ANSWER: Responses are posted in the "Current Funding Opportunities FAQs" section of ARPA-E's website available at http://arpa-e.energy.gov/?q=faq/current-funding-opportunities. In addition, general questions about ARPA-E can be found at http://arpa-e.energy.gov/?q=faq/general-questions.

ARPA-E will post responses on a weekly basis to questions that are received. ARPA-E will cease to accept questions approximately 5 business days in advance of each submission deadline. Responses to questions received before the cutoff will be posted approximately one business day in advance of the submission deadline. ARPA-E may re-phrase questions or consolidate similar questions for administrative purposes.

C. Will ARPA-E post a response to every question submitted to arpa-e-co@hq.doe.gov?

ANSWER: No. ARPA-E will only post responses to questions that have not already been addressed by a published FAQ. Also, ARPA-E may consolidate similar questions for administrative purposes.

D. If I have questions about ARPA-E exchange, who do I contact?

ANSWER: Applicants may submit questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE, to ExchangeHelp@hq.doe.gov. All emails must include the name and number of the Funding Opportunity Announcement in the subject line.

E. Can I speak or meet with the ARPA-E program director or other ARPA-E personnel about this funding opportunity announcement?

ANSWER: No. Upon the issuance of this Funding Opportunity Announcement (FOA), ARPA-E Program Directors and other ARPA-E personnel are prohibited from communicating (in writing or otherwise) with Applicants, or potential Applicants, regarding the FOA. This "quiet period" remains in effect until ARPA-E's public announcement of its project selections. During the "quiet period," Applicants may submit questions regarding the FOA to ARPA-E-CO@hq.doe.gov with the FOA name and number in the subject line. Applicants may also submit questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE, to ExchangeHelp@hq.doe.gov with the FOA name and number in the subject line. ARPA-E will not accept or respond to communications received by other means (e.g., fax, telephone, mail, hand delivery). Emails sent to other email addresses will be disregarded.



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F. Can a person be PI on one proposal and a Co-PI on a second separate proposal?

ANSWER: Yes, an individual may be on more than one submission – either as a lead or member of a Project Team.

G. May applicants submit more than one concept paper to this funding opportunity?

ANSWER: Yes, but each Concept Paper must be "scientifically distinct". This term is used in Section III.C.3 (Limitation on Number of Applications) of the FOA. In this context, the term "scientifically distinct" is used to emphasize that, in the event an Applicant intends to submit multiple concept papers/application, the applicant should propose distinct technical approaches in each application. This prohibition on duplicative applications involves a fact-based determination by ARPA-E to ensure a focused review of each technical concept, and appropriate use of ARPA-E's limited time/resources.

H. I have developed a technology that may be a good fit for this funding opportunity. Will ARPA-E please review my idea and let me know if it is responsive to this FOA?

ANSWER: ARPA-E will consider concepts that propose to meet or exceed the technical performance targets set forth in Section I.E (Technical Performance Targets) of the FOA and do not fall under Section I.F (Applications Specifically Not of Interest) of the FOA. Applicants must review the technical requirements of the FOA and independently determine whether their proposed concept warrants a submission.

I. Are foreign entities eligible to apply to this FOA?

ANSWER: Foreign entities are eligible to apply for funding. See Section III.A.3 (Eligibility Information- Foreign Entities) of the FOA. However, if the project is selected for award negotiations and an award is made, all work must be performed in the United States by subsidiaries or affiliates incorporated in the United States or U.S. territories, unless ARPA-E grants a foreign work waiver to allow performance of part of the work outside of the United States. ARPA-E's grant of a foreign work waiver is a fact dependent, case-by-case determination that is made only in exceptional circumstances and only for discrete parts of an award that necessitate foreign work. Applicants that anticipate the need for a foreign work waiver to perform some work outside of the U.S. should review Section 5 of the Business Assurances & Disclosures Form.

J. Are individuals eligible to apply to this FOA?

ANSWER: Yes. Individuals are eligible to apply for funding. See Section III.A (Eligibility Information) of the FOA. However, any ARPA-E award funding would need to be made to a business entity formed by the Applicant, if selected for award negotiations.

K. Are we required to register for the Teaming List for this FOA?

ANSWER: No. ARPA-E set up the Teaming Partner List for this FOA to facilitate formation of new project teams. There is no requirement for applicants or any team member to sign up/register for the Teaming Partner List. In addition, ARPA-E does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List.



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L. I missed the last Concept Paper deadline. Can I still submit a Full Application?

ANSWER: No. Only applicants who have successfully submitted a Concept Paper in eXCHANGE by the published deadline are eligible to submit a Full Application to the FOA.

M. Our project team includes several team members. Does each team member need to contribute cost share equally?

ANSWER: Although the cost share requirement applies to the Project Team as a whole, the funding agreement makes the Prime Recipient legally responsible for paying the entire cost share. See Section III.B.4 for more information on cost sharing. Each Project Team is free to determine how much each team member will contribute towards the cost share requirement. The amount contributed by individual Project Team members may vary, so long as the cost share requirement for the project as a whole is met.

N. Can you tell me whether my project team qualifies for reduced cost share?

ANSWER: ARPA-E may not provide pre-submission assessments on a project team's specific cost sharing requirement.

O. Will in-kind contributions count towards meeting our cost share requirements?

ANSWER: Yes, if the in-kind contribution is determined to be allowable, allocable and reasonable by the ARPA-E Contracting Officer. Since this is necessarily fact determinative inquiry, these types of questions are answered based on a review of all relevant information by the Contracting Officer during award negotiations. For general guidance on acceptable cost share contributions and corresponding cost principles used by the ARPA-E Contracting Officer to make these determinations, see 10 C.F.R § 600.313 and § 600.317 (Cost Matching/Sharing and Cost Principles for For-Profit Organizations), 2 C.F.R. § 200.306 and 2 C.F.R. Part 200, Subpart E (Cost Matching/Sharing and Cost Principles for Institutes of Higher Education, Hospitals, Other Nonprofit Organizations, State and Local Governments).

P. We have a question concerning the impact of a large business seeking patent rights under a class waiver if our team qualifies for reduced cost share of 10%. Does this mean the entire team project is subject to 20% cost share or only the large business' portion of the project will be subject to 20% cost share?

ANSWER: Per Section II.B.3 (Reduced Cost Share Requirement) of the FOA, under this scenario, only the large business' portion of the work under this scenario is subject to the 20% minimum cost share requirement. Please see Section III.B.3 (Reduced Cost Share Requirement), Section III.B.4 (Legal Responsibility), and Section III.B.5 (Cost Share Allocation) of the FOA for more details on the cost sharing requirements. NOTE: If the large business' portion of Total Project Costs is greater than 20%, then the project team's total cost share minimum is 20% since the team as a whole would no longer qualify for the 80/20 labor distribution for reduced cost share, per Section III.B.3 of the FOA.



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Q. Can you tell us whether our project team qualifies for reduced cost share based on the following scenario: []?

ANSWER: ARPA-E may not provide pre-submission assessments on a project team's specific cost sharing requirement.

R. How should we include references in our Full Application? Do they count towards the overall page limitation for the Technical Volume?

ANSWER: Applicants may provide a list of references in a separate bibliography. Only bibliographic information may be contained in the references, and no additional text or commentary should be included. There is no page limit for the bibliographic references section of the Full Application.

S. Our team originally submitted a Concept Paper that listed [organization name 1] as the Prime Recipient. For our Full Application, can we change the lead organization to **** [organization name 2] instead?

ANSWER: Yes, the ARPA-E eXCHANGE system will allow applicants to expand or otherwise modify the Project Team for their Full Applications.

T. Can I include new Co-PIs and/or sub-recipients in my Full Application?

ANSWER: Yes. Applicants may expand or otherwise modify the Project Team for their Full Applications.

U. My Concept Paper was encouraged. What are my chances of being selected for award negotiations by ARPA-E?

ANSWER: ARPA-E does not provide pre-submission assessments of Applicants' likelihood to receive funding.

V. Do sub-recipients also need to fill out the Business Assurances & Disclosures Form or is this filled out only by the Prime Recipient?

ANSWER: The Business Assurances & Disclosures Form requests information regarding the legal entity submitting the application as the Prime Recipient, the legal entities and/or individuals that are proposed to be Subrecipients, and the PI/Co-PIs in their individual capacity. The Prime Recipient may submit one Business Assurances & Disclosures Form covering all of the Project Team members if it has authorization and information to answer on their behalf. Alternatively, the Prime Recipient may request Subrecipients to complete and sign individual Business Assurances & Disclosures Forms that the Prime Recipient will append to its form.



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II. Questions for week ending: OCTOBER 17, 2014

Q9. [A potential applicant] looking for funding to prove out, develop and commercialize a new electrical power generation concept that could be applied either as part of a CHP system or as part of a low-cost solar power generation system. If [a potential applicant] has previously applied for funds for related development, but outside of the FOA scope, are they still eligible to apply for [the GENSETS] FOAs?

ANSWER: The answer to your question depends on the specific facts. Please see Section I.F. "Applications Specifically Not of Interest" of the FOA, in particular the 2nd and 11th bullets. Also of potential relevance: ARPA-E's mission is to accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty, and to prepare those technologies for commercialization in the marketplace. Therefore, ARPA-E may not fund projects that overlap with prior or current efforts funded by public or private sources.

III. Questions for week ending: OCTOBER 31, 2014

Q10. We are currently developing a ****. I am wondering on whether you would accept proposals for DE-FOA-0001198 on the development of ****. Once we have developed the technology further, we would partner with ****.

ANSWER: ARPA-E will consider concepts that propose to meet or exceed the technical performance targets set forth in Section I.E (Technical Performance Targets) of the FOA and do not fall under Section I.F (Applications Specifically Not of Interest) of the FOA. Applicants must review the technical requirements of the FOA and independently determine whether their proposed concept warrants a submission.

Q11.A. Does the proposal need to have both a prime mover and an electric generator or an innovative design of the electric generator will be sufficient?

ANSWER: The GENSETS FOA is seeking concepts for Combined Heat and Power (CHP) systems that are capable of using natural gas as fuel while producing electricity and heat as outputs with a fuel to electrical efficiency target of 40% (based on lower heating value of natural gas). Applications that fall outside the technical parameters specified in Section I.E of the FOA will be deemed nonresponsive and will not be reviewed or considered. Please see Section I.F (Applications Specifically not of Interest) of the FOA. In addition, please see Section I.E (Technical Performance Targets), Supplementary Explanation of Targets – Explanation No. 1.2 of the FOA.

Q11.B Is fault tolerance an important objective in the criteria as well?

ANSWER: Please see Section I.E (Technical Performance Targets) of the FOA.



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Q12.A. I just received the announcement of this FOA for 1KW Genset innovation. Has concept paper deadline has passed and can I still submit a Concept Paper?

ANSWER: The deadline to submit Concept Papers is December 1, 2014. Please see the GENSETS Funding Opportunity Announcement on the ARPA-E Funding opportunity Exchange website http://ARPA-E-FOA.energy.gov.

Q12.B May I present a concept for a GENSET that ****?

ANSWER: ARPA-E will consider concepts that propose to meet or exceed the technical performance targets set forth in Section I.E (Technical Performance Targets) of the FOA and do not fall under Section I.F (Applications Specifically Not of Interest) of the FOA. Applicants must review the technical requirements of the FOA and independently determine whether their proposed concept warrants a submission.

Q12.C May I discuss anything with the FOA examiner or point person?

ANSWER: Please see the response to Question 5 above.

IV. Questions for week ending: NOVEMBER 7, 2014

Q13. What are the restrictions on the Principal Investigator? Can there be more than 1?

ANSWER: A project may have a Principal Investigator and Co-Principal Investigators.

Q14. Regarding the opportunity for a device to provide both heating and cooling, in addition to electricity out, how should that cooling option be address in a concept paper response? In our opinion a cooling capability would broaden the market appeal due to the large number of homes that are currently air conditioned.

Assuming the device provides 1kW of electricty:

- Should the response just focus on heating only?
- Is a response stronger with an added cooling capability?
- Would cooling capability be viewed negatively?

What value does the addition of cooling add to the target cost of \$3,000?

ANSWER: The GENSETS FOA is seeking concepts for Combined Heat and Power (CHP) systems that are capable of using natural gas as fuel while producing electricity and heat as outputs with a fuel to electrical efficiency target of 40% (based on lower heating value of natural gas). Please refer Section I.E (Technical Performance Targets) of the FOA for the specific technical targets of the program. Compliant applications that meet or exceed the technical parameters specified in Section I.E of the FOA will be reviewed or considered.



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Cooling capability of the CHP system and its cost analysis are not sought under this FOA, however, if included in a Concept Paper will not be viewed negatively as long as the proposed concept for the CHP system meets or exceeds the technical targets in Section I.E. of the FOA.

- V. Questions for week ending: NOVEMBER 14, 2014
 - Q15. The main questions we have are regarding the stringent rules:
 - A. Why must the CHP system be 1kWe of continuous output and not higher?
 - B. Why to supply a continuous output when demand is lower during the night?
 - C. Do electric/hydraulic/heat storage concepts responsive under the FOA (sticking within the \$3k envelope)?
 - D. What are the metrics for carbon-related pollutants that must be taken into account in the Concept Paper?

ANSWER:

- A. Please refer to Section I.B.2.2 (The Optimal CHP System) of the FOA where the rationale behind focusing on a 1 kWe CHP system is provided.
- B. Please refer to Section I.B. 2.2 (The Optimal CHP System) of the FOA where the rationale behind requiring a reduced load is provided. In particular, please refer to the discussion provided on page 7 of the FOA under the subheading "Optimal Size and Efficiency".
- C. Electric/Hydraulic/Heat Storage for the CHP system and its cost analysis are not sought under this FOA. Please see the answer provided for Question H above.
- D. Please refer to Section I.E (Technical Performance Targets) of the FOA for the primary targets for carbon monoxide and carbon dioxide equivalent (CO2eq) emissions. In addition, please see the "Supplementary Explanation of Targets" Nos.: 1.5, 1.7-1.9, and 1.10 provided in Section I.E of the FOA.



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VI. Questions for week ending: NOVEMBER 21, 2014

Q16. The reduced cost share section of the FOA states that "any entity (such as a large business) receiving patent rights under a class waiver, or other patent waiver, that is part of a project team receiving this reduction must continue to meet the statutory minimum cost share requirement (20%) for its portion of the Total Project Cost."

Please clarify if the increased cost share to 20% as stated above applies just to the large business (the non-profits and small businesses would stay at 10%) or does the 20% apply across the total project team.

ANSWER: Please see the response to FAQ P above.

VII. Questions for first deadline: NOVEMBER 24, 2014

Q17. Please clarify whether the 1 kWe electrical output from the CHP system is meant to be provided at line-voltage (120vac/60hz)? For some configurations this would imply the use of an inverter.

ANSWER: Per Section I.D (Technical Categories of Interest) of the FOA, "...systems should accept natural gas at standard residential delivery pressures as their only fuel input and produce 60 Hz ac electrical output at 110 V." In addition, please see Footnote No. 44 in the FOA for additional guidance on this requirement.

VIII. Questions for the week ending: FEBRUARY 20, 2015

Q18. Our team consists of ***** [a nonprofit], two small businesses, and one medium sized company – a little over 2,000 employees. We submitted our concept paper at the 20% level. We just wanted to make sure this is the correct amount of cost share we should be providing.

ANSWER: Please review Modification 1 of the FOA at Section III.B (Reduced Cost Share Requirement) for clarification of cost share requirements. In addition, please see the response provided for FAQ Q above.



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IX. Questions for week ending: FEBRUARY 27, 2015

Q19. We were encouraged to write a full proposal on Feb 9 but there are no instructions on the content of the full application or the review criteria for the full proposal in the current FOA document. In the FOA, it states these sections will be updated in February. When should we receive instructions on the content of the full application and will we be granted a submission extension since we have 28 days left until the deadline?

ANSWER: On February 9, 2015, ARPA-E issued a modification to the GENSETS FOA that includes Full Application submission instructions which is available on the ARPA-E eXCHANGE portal at https://arpa-e-foa.energy.gov/. Information regarding the availability of the modified GENSETS FOA on eXCHANGE was included in each applicant's encourage/discourage notification.

Q20. Section 2.3 of the technical volume template contains the following bullet point: "The schedule should include a milestone for the delivery of a 1-kW_e prototype at the end of the second project year which will be subjected to independent testing. This prototype need not meet the final deliverable milestones for the project." Since this statement was not included in the FOA and only in the template, it is unclear to me if all projects are bound to this milestone. Please clarify if this is a requirement or not.

ANSWER: Per Section IV.D.1 (First Component: Technical Volume) of the FOA, the above-referenced information is a content requirement for all Technical Volume submissions. Please see Section IV.D.1 of the FOA for further information on the content requirements for the Technical Volume.

Q21. ***** [Name of Entity] received a notification to Encourage Submission of Full Application for the subject opportunity. ***** [Name of Entity] is a large business. Our potential partners consist of 1 Large Business and 1 Small Business. Our large business partner, as well as ***** [Name of Entity], desire to retain ownership of any inventions conceived during performance of the contract. Can an advanced waiver be issued (allowing ***** [Name of Entity] and our large business partner to retain ownership of our respective inventions, if any), prior to submittal of our full application?

ANSWER: Per Section VIII.F (Title to Subject Inventions) of the FOA, ARPA-E typically issues "class patent waivers" under which large businesses that meet certain stated requirements may elect to retain title to their subject inventions. ARPA-E issued a class waiver for ARPA-E funding agreements selected through FOAs during the 2013 and 2014 fiscal years, which applies to the GENSETS FOA. A copy of the class waiver can be downloaded on ARPA-E's website at http://arpa-e.energy.gov/arpa-e-site-page/award-guidance under "Intellectual Property Rights and Requirements". If a large business does not meet the criteria set forth in the class waiver to qualify



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for the class waiver, it may still request an advance waiver or identified invention waiver in accordance with 10 C.F.R. § 784.

Q22. Our ***** [description of technology] will produce DC electricity and will not require an alternator, but will require an inverter. For the cost and efficiency of the inverter, should we use the alternator price/efficiency relationship on P.18 of the FOA (alternator cost [\$] = 3250*nalt - 2520), or our best estimate of inverter cost and efficiency from referenced industry sources at one million unit volume in the future?

ANSWER: Per Section I.E (Technical Performance Targets), Supplementary Explanation of Targets – Explanation No. 1.5 of the FOA, "...The cost of commercially available alternators varies essentially linearly as the efficiency increases from 0.8 to 0.96 according to: Alternator cost [\$] = 3250*nalt – 2520. Systems that do not need an alternator can exclude this cost."

X. Questions for week ending: MARCH 6, 2015

Q23. Under what circumstances would an applicant identify more than one applicant in section 9 of the SF-424?

ANSWER: Applicants that have formed a project team should select the appropriate applicant type for each team member from the drop down menu provided in Question 9 of the SF-424. Applicants may download instructions on completing the SF-424 at the following website: http://www.grants.gov/web/grants/form-instructions/sf-424-instructions.html.

Q24. Are team members' congressional districts included in Item 16 of the SF-424 and are these the districts where the work is actually being performed?

ANSWER: Applicants should list the Prime Recipient's congressional district and any districts that may be affected by the project (i.e. where work is performed). Applicants may download instructions on completing the SF-424 at the following website:

http://www.grants.gov/web/grants/form-instructions/sf-424-instructions.html.



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Q26. The ARPA-E Model Sub-award identifies attachments 1, 2, 3, 4 and 6. Are attachments 3, 4 & 6 of the Model Sub-award the same attachments that are submitted in the Prime Recipient Award (with the Sub-recipient work indicated), or are these attachments modified to include only the Sub-recipient work?

ANSWER: Per the instructions provided in the ARPA-E Model Sub-award, the Prime Recipient should attach the same Attachment 3, 4, and 6 associated with the Prime Recipient's award with ARPA-E. Please note that it is the Prime Recipient's responsibility to ensure that the terms and conditions of its sub-award comply with all regulatory and programmatic requirements. ARPA-E does not mandate use of the Model Sub-award.

Q27. My company will be the Prime Recipient of the project. However, we will be working with **** (a university) and its engineers and staff on many of the technical issues. Our company will share the PI responsibility with a professor at the University. The Business Assurance and Disclosures Form asks that the applicant's authorized representative for sign and the PI sign. My thought is that I should sign as the representative and the university professor should sign as the PI. Please advise.

ANSWER: Per the instructions included with the Business Assurances & Disclosures (BA&D) Form, the Prime Recipient is required to complete and submit the BA&D Form, meaning the authorized representative and Principal Investigator (PI) signature lines should be signed by the appropriate individual(s) employed the Prime Recipient. The Prime Recipient may submit one Business Assurances & Disclosures Form covering all of the Project Team members if it has authorization and information to answer on their behalf. Alternatively, the Prime Recipient may request Subrecipients to complete and sign individual Business Assurances & Disclosures Forms that the Prime Recipient will append to its form.

Q28. Can we modify the requested funding level from the concept paper to the full application?

ANSWER: Yes.

Q29. Can we modify the requested project duration from the concept paper to the full application?

ANSWER: Yes.



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Q30. We're a small business and we'll be partnering with a university (we're the prime). The application states universities require a 5% cost share, and small businesses require a 10% cost share. If the total project cost is \$1,000,000 and both the small business and university are contributing \$500,000, does this mean we provide \$50k and they provide \$25k as a minimum? Or do we have to provide \$75k to make up for the additional 5% their not paying to bring the total cost share up to 10%?

ANSWER: The cost share requirement applies to the Project Team as a whole. The ARPA-E funding agreement makes the Prime Recipient legally responsible for paying the entire cost share. See Section III.B.4 for more information on cost sharing. Each Project Team is free to determine how much each team member will contribute towards the cost share requirement. The amount contributed by individual Project Team members may vary, so long as the cost share requirement for the project as a whole is met.

Q31. Can a smaller effort working on a key technological innovation demonstration that can be coupled with other projected efficiency gains be considered for funding at a lower-level without having to do a full demonstration, or meet all of the FOA metrics?

ANSWER: ARPA-E will consider Full Applications that propose to meet or exceed the technical performance targets set forth in Section I.E (Technical Performance Targets) of the FOA and do not fall under Section I.F (Applications Specifically Not of Interest) of the FOA. According to Section I.F of the FOA (Applications Specifically Not of Interest), applications that fall outside the technical parameters specified in Section I.E of the FOA will be deemed nonresponsive and will not be reviewed or considered.

Q32. Attachment 2 of the Model Subaward Agreement identifies web addresses for IP provisions. However, the web addresses do not work. Please provide a working link to each of the three IP provisions identified in Attachment 2.

ANSWER: All three versions of Attachment 2 of ARPA-E's Model Cooperative Agreement can be downloaded at the following URL: http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance.



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Q33. We were encouraged to submit a full proposal for the DE-FOA-0001198 – GENSETS FOA. Upon brainstorming, we are finding a new ways to improve the Fuel-electricity efficiency. Are we allowed to change the hardware and strategies discussed in our concept paper or do we have to stick to what was initially proposed?

ANSWER: Hardware and relevant strategies discussed in a Concept Paper may be modified in the Full Application as long as the concept remains substantively the same as proposed in the Concept Paper. In its Full Applications, applicants must identify and justify the need for such modifications. Applicants must ensure that, with the changed hardware and relevant strategies, the concept still meets or exceeds the technical performance targets set forth in Section I.E (Technical Performance Targets) of the FOA and do not fall under Section I.F (Applications Specifically Not of Interest) of the FOA.

Q34. Clause 23 b. "Pre Award Costs" of Attachment 1 of the Prime Recipient Model award allows for the recovery of allowable costs (\$20K or less) incurred up to 90 days before the effective date of the award. The model Subaward does not contain this provision. Are sub-recipients allowed to recover allowable costs (\$20K or less) incurred up to 90 days before the effective date of the award, or, does the \$20K limit provision in the Prime Recipient Model Award apply to the total of both the Prime's pre-awards costs and potential pre-award costs of all sub-recipients?

ANSWER: Pre-Award Costs apply to the Project Team as a whole. Both the Prime Recipient and any Sub-recipients may incur pre-award costs. The Prime Recipient is responsible for seeking reimbursement on behalf of its Sub-recipient. The \$20,000 approval threshold is cumulative and would apply to the total of pre-award costs incurred by the Prime and its Sub-recipients.

Q35. Please clarify the amount that ARPA-E will pay the Prime Recipient and the Sub-recipients for patent costs – does the \$30,000 threshold on patent expenditures apply to both or are these separate amounts which total to \$60,000.

ANSWER: Although both the Prime Recipient and any Sub-recipients may incur patent costs, the \$30,000 limitation on expenditures for filing and prosecution of United States Patent applications, including international applications ("PCT applications") submitted to the USPTO applies to the entire Project Team. The Prime Recipient is responsible for seeking reimbursement on behalf of its Sub-recipient(s).



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Q36. In the Technical Volume Template, it mentions that the Executive Summary shall not exceed 1 page in length and should be on a page separate from the Summary for Public Release. What is the Summary for Public Release and where is it in the FOA? Also, does the executive summary need to be on the first page, same page as the title?

ANSWER: Information on the content and form of the Summary for Public Release can be found in Section IV.D.4 (Summary for Public Release) of the FOA. Per the template Technical Volume on ARPA-E eXCHANGE, the Executive Summary should appear on the first page of the Technical Volume along with the Project Title. Please see Section IV.D.1 (Technical Volume) of the FOA and the template Technical Volume available on eXCHANGE (https://arpa-e-foa.energy.gov/) for more information.

Q37. In the event of a suspension or termination of a Prime Award by the ARPA-E Contracting Officer, will the Contracting Officer notify the Sub-Recipients directly of applicable suspension/termination of Subawards or does this notification responsibility flow from the Prime Recipient to Sub-Recipients?

ANSWER: ARPA-E will only notify the legal entity with which it has a funding agreement with (i.e. the Prime Recipient) of material non-compliance with the award terms and conditions or of a suspension of the award.

Q38. The Budget Justification Guidance that states: "No individual may be paid more than \$200,000 per year under an ARPA-E funding agreement". Does that mean the individuals have a salary cap, or does that mean you cannot charge the grant/agreement more than \$200,000 per person?

ANSWER: This requirement means that the agreement cannot be charged more than \$200,000 per individual. It does not limit how much an employer pays its employee.



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XI. Questions for week ending: MARCH 13, 2015

Q39. Does the "cost share grace period" also apply to a team in which 80% of the work is completed by small businesses and a non-profit, or does the grace period only apply in the case that small businesses perform 80% or greater of the work?

ANSWER: The "Cost Share Grace Period" applies only to project teams that qualify for a reduced cost share requirement under Bullets 2 and 3 in Section III.B.3 (Reduced Cost Share Requirement) of the FOA.

Q40. I'm working with a team at **** (name of university) preparing a proposal to GENSETS (DE-FOA-0001198). One of their partners is an FFRDC – we have already sent them the business assurances form to complete their sections in that document, so our question is do they complete the budget justification spreadsheet as well or is there another budget form that they are required to complete?

ANSWER: Per Section IV.D.3 (Content and Form – Budget Justification Workbook/SF-424A) of the FOA, each Subrecipient incurring greater than or equal to 10% of the Total Project Cost must complete a separate Budget Justification workbook to justify its proposed budget. These worksheets must be inserted as additional sheets within in the Prime Recipient's Budget Justification. Subrecipients incurring less than 10% of the Total Project Cost are not required to complete a separate Budget Justification workbook. See Section IV.D.3 of the FOA and the "Budget Justification/SF-424A Workbook Guidance" available on ARPA-E eXCHANGE for additional instructions on completing these forms.

Q41. I am working on a Field Work Proposal that is needed for a submission to an FOA, DE-FOA-0001198, and need to include the contact information for the Program Area Director. Could you please provide that information to me?

ANSWER: Applicants may enter "TBD" in this field. As provided in the instructions for Section 8 (Field Work Proposal) of the Business Assurances & Disclosures Form, applicants should refer to the DOE Work Proposal instructions included in DOE O 412.1A, "Work Authorization System" available at https://www.directives.doe.gov/directives-documents/400-series/0412.1-BOrder-a/view for guidance on completing Field Work Proposals.



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Q42. Based on the "suggested" page length instructions in the Technical Volume template we intended to use 14-15 pages for the Proposed Work Section, while meeting the overall maximum 30 page requirement. Please confirm that this is acceptable.

ANSWER: The Technical Volume template provides suggested page lengths to applicants for each section; however, applicants may independently decide how much space to allocate to each section of the Technical Volume. Note: Per Section IV.D (Content and Form of Full Applications) of the FOA, if applicants exceed the maximum page limitation of 30 pages for the Technical Volume, ARPA-E will only review the authorized number of pages, starting with the first page and then each of the following 29 pages, and disregard any additional pages.

Q43. Per Section 2.3 (Schedule) of the GENSETS Technical Volume Template, the schedule should include a milestone for the delivery of a 1-kWe prototype at the end of the second project year which will be subjected to independent testing. Will ARPA-E permanently keep the Year-2 prototype? If ARPA-E returns the Year-2 prototype, how long does ARPA-E plan to keep it for independent testing?

ANSWER: ARPA-E does not plan to permanently retain any prototypes developed by GENSETS performers. Prototypes will be promptly returned after independent testing has concluded.

Q44. Can the full application use color, or should it be only black-and-white?

ANSWER: Applicants may use colors for charts, diagrams, or pictures. Section IV.D (Content and Form of Full Applications) of the FOA, all text must be in a black font color.

Q45. Can I include a full-text reference paper in the references section? I have a reference that provides particular light on the proposal. For the convenience of the reviewers (avoiding the time and cost of obtaining the reference.) I would like to include the full text in the reference section.

ANSWER: Section IV.D.1 (Content and Form – Technical Volume) of the FOA, only bibliographic information may be contained in the references section of the Technical Volume. No additional text or commentary is allowed.

Q46. The GENSETS are to be located in residences. Can water from the residence be used?

ANSWER: Applicants may use the residential water supply for meeting or exceeding the technical performance targets set forth in Section I.E (Technical Performance Targets – Number 1.3) of the FOA.